

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

APPLICATION OF CHRISTIAN COUNTY WATER)
DISTRICT, OF CHRISTIAN COUNTY, KENTUCKY)
FOR (1) A CERTIFICATE OF PUBLIC CONVEN-)
IENCE AND NECESSITY, PERMITTING SAID)
DISTRICT TO CONSTRUCT A WATERWORKS CON-)
STRUCTION PROJECT, CONSISTING OF EXTEN-)
SIONS, ADDITIONS, AND IMPROVEMENTS TO) CASE NO. 8664
THE EXISTING WATERWORKS SYSTEM OF THE)
DISTRICT; (2) APPROVAL OF THE PROPOSED)
PLAN OF FINANCING OF SAID PROJECT; AND)
(3) APPROVAL OF THE INCREASED WATER)
RATES PROPOSED TO BE CHARGED BY THE)
DISTRICT TO CUSTOMERS OF THE DISTRICT)

O R D E R

IT IS ORDERED that Christian County Water District shall file an original and seven copies of the following information with the Commission by December 3, 1982. Christian County Water District shall furnish the name of the witness who will be available at the public hearing to respond to questions concerning each item of information provided. If neither the requested information nor a motion for an extension of time is filed by the stated date, the case will be dismissed.

1. Provide copies of the monthly water bills for the three previous years and the test year from the City of Crofton, City of Hopkinsville and Barkley Lake Water District.

2. Provide an explanation as to how the quantity of water to be purchased daily, weekly and monthly from each supplier is determined.

3. Provide an explanation as to why the wholesale water rate of the City of Hopkinsville was chosen to be used in the calculation of the pro forma adjustments to purchased water expense for phase II of the system.

4. Provide an explanation of the discrepancy between the number of new customers to be added to the system contained on page 1 of the Letter of Conditions from FmHA and the number of new customers used by the applicant in calculating the pro forma adjustments.

5. Provide copies of the monthly electric bills for the test year and include an explanation as to which account they are recorded and the utility facilities at each location receiving a utility bill.

6. Provide a detailed explanation of the basis for the assumption used in the calculation of the pro forma adjustments to electric expense, that the cost of electricity will be directly associated with the number of gallons of water pumped.

7. Provide an explanation of the derivation of the average monthly usage of water of 4,000 gallons used in the pro forma adjustment to purchased water.

8. Provide a detailed breakdown of the costs incurred in the following accounts for the test year. At a minimum the analysis should include a brief description of each expenditure, the name of the vendor, the date and amount of the purchase, and the reference or voucher number.

- a. Account 641, Operation Supplies and Expenses
- b. Account 652, Maintenance of Services
- c. Account 921, Office Supplies and Other Expenses

9. Provide a detailed analysis of expenses incurred during the test year for professional services as shown in attached Format No. 1, and all detailed working papers supporting the analysis. At minimum the work papers should show the payee, dollar amount, reference (i.e., voucher number, etc.), account charged, hourly rates and time charged to the utility according to each invoice, and a brief description of the service provided.

10. For each employee or officer employed by the Christian County Water District during the test year provide the following information.

- a. Name of employee or officer.
- b. Job title and a complete description of the duties and responsibilities concerning the individual.
- c. Total amount of compensation and employee benefits charged to operating expenses for each employee during the test year.
- d. Rate of pay for each employee of the district at the beginning of the test year and at the end of the test year.
- e. Total amount of regular hours and overtime hours worked during the test year by each employee.

11. Provide an explanation of the agreement between the Christian County Water District and the county government as to the payment of salaries by the county government for the water district referred to in pro forma adjustment no. 2. Also include the date this agreement expired.

12. Provide any further details available in support of the estimated 10 percent increase included in the pro forma adjustment no. 7 for maintenance.

13. Provide a further explanation of the pro forma adjustment to plant supplies and an explanation as to which account this has been recorded in the past.

14. Provide a schedule which shows the type and amount of coverage provided and the annual premium for each insurance policy in force during the test year. Also provide a copy of the document which reflects the proposed increase in insurance rates for the addition to the system.

15. Provide a detailed breakdown of the computer expense including any contracts or agreements that may be involved.

16. Provide a comparative balance sheet for the test year and the year ending June 30, 1981.

17. Provide statements showing the amount of unemployment insurance paid during the test year.

18. Provide an explanation of the discrepancy in present rates as stated in Exhibit B and Exhibit K.

19. Provide a billing analysis of present and proposed rates showing usage and revenue by rate increment for each customer

category. The billing analysis should be prepared by using Format 2 which is attached. Instructions for the preparation of Format 2 are also attached.

Done at Frankfort, Kentucky, this 17th day of November, 1982.

PUBLIC SERVICE COMMISSION


For the Commission

ATTEST:

Secretary

Christian County Water District

Case No. 8664

Professional Service Expenses

For the Twelve Months Ended June 30, 1982

| <u>Line No.</u> | <u>Item</u> | <u>Rate Case</u> | <u>Annual Audit</u> | <u>Other</u> | <u>Total</u> |
|---------------------|-------------|------------------|---------------------|--------------|--------------|
| 1. | Legal | | | | |
| 2. | Engineering | | | | |
| 3. | Accounting | | | | |
| 4. | Other | | | | |
| 5. | Total | | | | |

Test Period from _____ to _____

Water Used by Rate Increment

Class: _____

[illegible]

Revenue By Rate Increment

[illegible]

IV. Billing Analysis

The billing analysis is the chart reflecting the usage by the customers as well as the revenue generated by a specific level of rates. A billing analysis of both the current and proposed rates is mandatory for analysis of this rate filing. The following is a step-by-step description which may be used to complete the billing analysis. A completed sample of a billing analysis is also included. Although the sample reflects water usage, it is equally applicable for gas companies using a declining block rate design. This billing analysis is not intended for companies using a flat rate design.

a. Usage Table (Usage by Rate Increment)

Information needed to complete the usage table should be obtained from the meter books or other available usage records. The usage table is used to spread total usage into the proper incremental rate step.

Column No. 1 is the incremental steps in the present or proposed rate schedule for which the analysis is being made. Column No. 2 is the number of bills in each incremental rate step. Column No. 3 is the total gallons used in each incremental rate step. Column Nos. 4, 5, 6, 7, 8 and 9 are labeled to correspond to the incremental rate steps shown in Column No. 1 and contains the actual number of gallons used in each incremental rate step.

Example for completing Usage Table is as follows:

Column No. 1 is incremental rate steps.

Columns No. 2 and 3 are completed by using information obtained from usage records.

Columns No. 4, 5, 6, 7, 8 and 9 are completed by the following steps:

Step 1: 1st 2,000 gallons minimum bill rate level
432 Bills
518,400 gallons used
All bills use 2,000 gallons or less, therefore,
all usage is recorded in Column 4.

Step 2: Next 3,000 gallons rate level
1,735 Bills
4,858,000 gallons used
1st 2,000 minimum x 1,735 bills = 3,470,000
gallons - record in Column 4
Next 3,000 gallons - remainder of water over
2,000 = 1,388,000 - record in Column 5

Step 3: Next 10,000 gallons rate level
 1,830 Bills
 16,268,700 gallons used
 1st 2,000 minimum x 1,830 bills = 3,660,000 gallons -
 record in Column 4
 Next 3,000 gallons x 1,830 bills = 5,490,000 gallons -
 record in Column 5
 Next 10,000 gallons - remainder of water over 3,000 =
 7,118,700 gallons - record in Column 6

Step 4: Next 25,000 gallons rate level
 650 bills
 15,275,000 gallons used
 1st 2,000 minimum x 650 bills = 1,300,000 gallons -
 record in Column 4
 Next 3,000 gallons x 650 bills = 1,950,000 gallons -
 record in Column 5
 Next 10,000 gallons x 650 bills = 6,500,000 gallons -
 record in Column 6
 Next 25,000 gallons - remainder of water over 10,000 =
 5,525,000 gallons - record in Column 7

Step 5: Over 40,000 gallons rate level
 153 bills
 9,975,600 gallons used
 1st 2,000 minimum x 153 bills = 306,000 gallons -
 record in Column 4
 Next 3,000 gallons x 153 bills = 459,000 gallons -
 record in Column 5
 Next 10,000 gallons x 153 bills = 1,530,000 gallons -
 record in Column 6
 Next 25,000 gallons x 153 bills = 3,825,000 gallons -
 record in Column 7
 Over 40,000 gallons - remainder of water over 25,000 =
 3,855,600 gallons - record in Column 8

Step 6: Total each column for transfer to Revenue Table.

b. Revenue Table (Revenue by Rate Increment)

Revenue Table is used to determine the revenue produced from the Usage Table. Column No. 1 is the incremental rate steps in the rate schedule for which the analysis is being made. Column No. 2 indicates the total number of bills. Column No. 3 is the number of gallons accumulated in each rate increment (Totals from Columns 4, 5, 6, 7 and 8 of the above usage table). Column No. 4 is the rates to be used in determining revenue. Column No. 5 contains revenue produced.

Example for completing Revenue Table is as follows:

Complete Columns No. 1, 2 and 3 using information from Usage Table.

Complete Column No. 4 using rates either present or proposed.

Column No. 5 is completed by first multiplying the bills times the minimum charge.

Then, starting with the second rate increment, multiply Column No. 3 by Column No. 4 and total.

Revenue from Present/Proposed Rates

Test Period From 1-1-81 to 12-31-81

USACE TABLE Usage by Rate Increment

Residential

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---------------------|-------|-------------|-----------|------------|-------------|-------------|-------------|------------|
| | Bills | Gallons/MCF | 1st 2,000 | Next 3,000 | Next 10,000 | Next 25,000 | Over 40,000 | Total |
| 2,000: Minimum Bill | 432 | 518,400 | 518,400 | | | | | 518,400 |
| 3,000 Gallons | 1,735 | 4,850,000 | 3,470,000 | 1,388,000 | | | | 4,850,000 |
| 10,000 Gallons | 1,830 | 16,268,700 | 3,660,000 | 5,490,000 | 7,118,700 | | | 16,268,700 |
| 25,000 Gallons | 650 | 15,275,000 | 1,300,000 | 1,950,000 | 6,500,000 | 5,525,000 | | 15,275,000 |
| 40,000 Gallons | 153 | 9,975,600 | 306,000 | 459,000 | 1,510,000 | 3,825,000 | 3,855,600 | 9,975,600 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Total | 4,800 | 46,895,700 | 9,254,400 | 9,287,000 | 15,148,700 | 9,350,000 | 3,855,600 | 46,895,700 |

REVENUE TABLE

Revenue by Rate Increment

| (1) | (2) | (3) | (4) | (5) |
|---------------------|-------|-------------|-------------|---------------------------|
| | Bills | Gallons/MCF | Rate | Revenue |
| 2,000: Minimum Bill | 4,800 | 9,254,400 | \$5.00 Min. | \$26,000.00 |
| 3,000 Gallons | | 9,287,000 | 2.50 | 23,217.50 |
| 10,000 Gallons | | 15,148,700 | 2.00 | 30,297.40 |
| 25,000 Gallons | | 9,350,000 | 1.25 | 11,687.50 |
| 40,000 Gallons | | 3,855,600 | .75 | 2,891.70 |
| | | | | |
| | | | | |
| | | | | |
| | | | | \$92,096.10 Total Revenue |